

Application No. 09/721,904
Amendment dated December 16, 2004
Reply to Non-Final Action of July 20, 2004

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LISTING OF CLAIMS

Claims 1 to 169 (previously cancelled)

170. (currently amended) A method of stimulating expression of at least one defensin in a mammal in need thereof, by administering to directly exposing epithelial cells of the mammal to a compound comprising soluble CD14, wherein the compound comprises CD14 obtained from a mammalian mammary secretion, so as to directly expose epithelial cells of the mammal to the compound.

171. (previously added) The method of claim 170, wherein the CD14 is obtained from bovine milk.

172. (previously presented) The method of claim 170 wherein, if the secretion has been previously subjected to a treatment step, the treatment step is sufficiently mild to permit preservation of CD14 activity for inducing or stimulating defensin production in epithelial cells.

173. (previously presented) The method of claim 170, wherein the CD14 is contained in a liquid.

174. (previously presented) The method of claim 173, wherein the liquid comprises a fraction of the milk enriched in said CD14.

175. (previously presented) The method of claim 170, wherein said CD14 is contained in an edible product.

176. (previously presented) The method of claim 170, including administering the CD14 to the mammal orally.

Claims 177 to 179 (previously cancelled)

180. (previously amended) A method of stimulating expression of at least one defensin in a mammal in need thereof, by directly exposing epithelial cells of the mammal to a compound comprising soluble CD14 or a polypeptide portion of CD14 that enhances said expression, or a

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conservatively substituted variant of said CD14 or the portion that enhances said expression, and exposing epithelial cells of the mammal comprises exposing the respiratory tract of a said mammal to an effective amount of a said compound and includes administering the compound in the form of an aerosol.

Claims 181 to 198 (previously cancelled)

199. (currently amended) A method of stimulating expression of at least one defensin in a mammal in need thereof, by administering to directly exposing epithelial cells of the mammal to a compound, wherein said compound comprises an amino acid sequence selected from the group of sequences identified as SEQ ID NO:4 so as to directly expose epithelial cells of the mammal to the compound, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:7.

200. (currently amended) The method claim 199, wherein the compound comprises is a protein obtained from a mammalian mammary secretion.

201. (previously amended) The method of claim 200, wherein the protein is obtained from bovine milk.

202. (currently amended) The method of claim 201, wherein the protein consists essentially of ~~comprises~~ the amino acid sequence identified as SEQ ID NO:4.

Claims 203 to 221 (previously cancelled)

222. (currently amended) A method of stimulating the expression of a defensin in a mammal, the method comprising administering to directly exposing epithelial cells of the mammal to an isolated protein comprising an amino acid sequence selected from the group of amino acid sequences identified as SEQ ID NO:4 so as to directly expose epithelial cells of the mammal to the protein, SEQ ID NO:5, SEQ ID NO:6, and SEQ ID NO:7.

223. (currently amended) The method of claim 222, wherein the protein consists essentially of said amino acid sequence ~~is the amino acid sequence~~ identified as SEQ ID NO:4.

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224. (cancelled)

225. (cancelled)

226. (currently amended) A method of enhancing expression of defensins in a mammal in need thereof, the method comprising administering to ~~directly exposing epithelial cells of the mammal~~ to an isolated protein comprising an amino acid sequence ~~selected from the group of amino acid sequences identified as SEQ ID NO:4~~ so as to directly expose epithelial cells of the mammal to the protein, SEQ ID NO:5, SEQ ID NO:6, and SEQ ID NO:7.

227. (currently amended) The method of claim 226, wherein the protein consists essentially of said amino acid sequence ~~is the amino acid sequence identified as SEQ ID NO: 4.~~

228. (currently amended) The method of claim 180, wherein the compound comprises an amino acid sequence ~~selected from the group of sequences identified as SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:7,~~ or a conservatively substituted variant thereof.

229. (currently amended) The method of claim 228, wherein the compound comprises an amino acid sequence ~~selected from the group of sequences identified as SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:7.~~

230. (currently amended) The method of claim 229, wherein the compound consists essentially of the ~~comprises an~~ amino acid sequence identified as SEQ ID NO:4.

Claims 231 to 255 (previously cancelled)

256. (new) The method of claim 170, wherein said mammal is a non-neonate human.

257. (new) The method of claim 171, wherein said mammal is a non-neonate human.

258. (new) The method of claim 172, wherein said mammal is a non-neonate human.

259. (new) The method of claim 173, wherein said mammal is a non-neonate human.

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260. (new) The method of claim 174, wherein said mammal is a non-neonate human.

261. (new) The method of claim 175, wherein said mammal is a non-neonate human.

262. (new) The method of claim 176, wherein said mammal is a non-neonate human.

263. (new) The method of claim 180, wherein said mammal is a non-neonate human.

264. (new) The method of claim 199, wherein said mammal is a non-neonate human.

265. (new) The method of claim 200, wherein said mammal is a non-neonate human.

266. (new) The method of claim 201, wherein said mammal is a non-neonate human.

267. (new) The method of claim 202, wherein said mammal is a non-neonate human.

268. (new) The method of claim 222, wherein said mammal is a non-neonate human.

269. (new) The method of claim 223, wherein said mammal is a non-neonate human.

270. (new) The method of claim 226, wherein said mammal is a non-neonate human.

271. (new) The method of claim 227, wherein said mammal is a non-neonate human.

272. (new) The method of claim 228, wherein said mammal is a non-neonate human.

273. (new) The method of claim 229, wherein said mammal is a non-neonate human.

274. (new) The method of claim 230, wherein said mammal is a non-neonate human.

275. (new) The method of claim 256, wherein said compound is an edible product and the product readily releases said CD14 upon mastication.

276. (new) The method of claim 257, wherein said compound is an edible product and the product readily releases said CD14 upon mastication.

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277. (new) The method of claim 258, wherein said compound is an edible product and the product readily releases said CD14 upon mastication.

278. (new) The method of claim 262, wherein said compound is an edible product and the product readily releases said CD14 upon mastication.

279. (new) The method of claim 264, wherein said compound is an edible product and the product readily releases said amino acid sequence upon mastication.

280. (new) The method of claim 265, wherein said compound is an edible product and the product readily releases said protein upon mastication.

281. (new) The method of claim 266, wherein said compound is an edible product and the product readily releases said protein upon mastication.

282. (new) The method of claim 267, wherein said compound is an edible product and the product readily releases said protein upon mastication.

283. (new) The method of claim 268, wherein said protein is included as a component of an edible product and the product readily releases said protein upon mastication.

284. (new) The method of claim 269, wherein said protein is included as a component of an edible product and the product readily releases said protein upon mastication.

285. (new) The method of claim 270, wherein said protein is included as a component of an edible product and the product readily releases said protein upon mastication.

286. (new) The method of claim 271, wherein said protein is included as a component of an edible product and the product readily releases said protein upon mastication.

287. (new) The method of claim 170, wherein said compound is included as a component of a malleable product which readily releases the compound upon mastication.

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288. (new) The method of claim 199, wherein said compound is included as a component of a malleable product which readily releases the compound upon mastication.

289. (new) The method of claim 222, wherein said protein is included as a component of a malleable product which readily releases the protein upon mastication.

290. (new) The method of claim 226, wherein said protein is included as a component of a malleable product which readily releases the protein upon mastication.

291. (new) The method of claim 275, wherein said product is malleable.

292. (new) The method of claim 276, wherein said product is malleable.

293. (new) The method of claim 277, wherein said product is malleable.

294. (new) The method of claim 278, wherein said product is malleable.

295. (new) The method of claim 170, wherein said compound is topically applied to human skin.

296. (new) The method of claim 171, wherein said compound is topically applied to human skin.

297. (new) The method of claim 180, wherein said compound is topically applied to human skin.

298. (new) The method of claim 199, wherein said compound is topically applied to human skin.

299. (new) The method of claim 202, wherein said compound is topically applied to human skin.

300. (new) The method of claim 295, wherein said compound is applied to a wound.

301. (new) The method of claim 296, wherein said compound is applied to a wound.

302. (new) The method of claim 297, wherein said compound is applied to a wound.

303. (new) The method of claim 298, wherein said compound is applied to a wound.

304. (new) The method of claim 299, wherein said compound is applied to a wound.

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305. (new) The method of claim 295, wherein said compound is contained in an ointment.

306. (new) The method of claim 296, wherein said compound is contained in an ointment.

307. (new) The method of claim 298, wherein said compound is contained in an ointment.

308. (new) The method of claim 299, wherein said compound is contained in an ointment.

309. (new) The method of claim 300, wherein said compound is contained in an ointment.

310. (new) The method of claim 301, wherein said compound is contained in an ointment.

311. (new) The method of claim 303, wherein said compound is contained in an ointment.

312. (new) The method of claim 304, wherein said compound is contained in an ointment.